



SEQUENCE LISTING

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<120> POLYNUCLEOTIDE FUNCTIONALLY CODING FOR THE LHP PROTEIN FROM MYCOBACTERIUM TUBERCULOSIS, ITS BIOLOGICALLY ACTIVE DERIVATIVE FRAGMENTS, AS WELL AS METHODS USING THE SAME

<130> 0660-0165-0XPCT

<140> 09/462,480

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<151> 1998-07-16

<150> 60/052,631

<151> 1997-07-16

<160> 34

<170> PatentIn version 3.0

<210> 1

<211> 1277

<212> DNA

<213> Mycobacterium tuberculosis

<400> 1

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<210> 2

<211> 524

<212> DNA

<213> Mycobacterium tuberculosis

<400> 2

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 ggtccggggag cgatgggcca gggttcgcaa tccggcggtt ccaccagccc ggggtctggtc 360
 gcgccggcac cgctcgcgca ggagcgtgaa gaagacgacg aggacgactg ggacgaagag 420
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<210> 3

<211> 481

<212> DNA

<213> Mycobacterium tuberculosis

<400> 3

ctgcagcagg tgacgtcggt gttcagccag gtgggaggca ccggcgggcg caaccagcc 60

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gacgactggg gagctcccgt aatgacaaca gacttcccgg ccacccgggc cggaagactt 480
g 481

<210> 4

<211> 302

<212> DNA

<213> Mycobacterium tuberculosis

<400> 4

atggcagaga tgaagaccga tgccgctacc ctcgggcagg aggcaggtaa tttcgagcgg 60
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ggccagtggc gcggcgcggc ggggacggcc gcccaggccg cgggtgggtgcg cttccaagaa 180
gcagccaata agcagaagca ggaactcgac gagatctcga cgaatattcg tcaggccggc 240
gtccaatact cgagggccga cgaggagcag cagcaggcgc tgtcctcgca aatgggcttc 300
tg 302

<210> 5

<211> 100

<212> PRT

<213> Mycobacterium tuberculosis

<400> 5

Met Ala Glu Met Lys Thr Asp Ala Ala Thr Leu Gly Gln Glu Ala Gly
1 5 10 15

Asn Phe Glu Arg Ile Ser Gly Asp Leu Lys Thr Gln Ile Asp Gln Val
20 25 30

Glu Ser Thr Ala Gly Ser Leu Gln Gly Gln Trp Arg Gly Ala Ala Gly
35 40 45

Thr Ala Ala Gln Ala Ala Val Val Arg Phe Gln Glu Ala Ala Asn Lys
50 55 60

Gln Lys Gln Glu Leu Asp Glu Ile Ser Thr Asn Ile Arg Gln Ala Gly
65 70 75 80

Val Gln Tyr Ser Arg Ala Asp Glu Glu Gln Gln Gln Ala Leu Ser Ser
85 90 95

Gln Met Gly Phe
100

<210> 6

<211> 49

<212> PRT

<213> Mycobacterium tuberculosis

<400> 6

Met Ala Glu Met Lys Thr Asp Ala Ala Thr Leu Gly Gln Glu Ala Gly
1 5 10 15

Asn Phe Glu Arg Ile Ser Gly Asp Leu Lys Thr Gln Ile Asp Gln Val
20 25 30

Glu Ser Thr Ala Gly Ser Leu Gln Gly Gln Trp Arg Gly Ala Ala Gly
35 40 45

Thr

<210> 7

<211> 42

<212> PRT

<213> Mycobacterium tuberculosis

8)
Gx
<400> 7

Gln Glu Ala Ala Asn Lys Gln Lys Gln Glu Leu Asp Gly Ile Ser Thr
1 5 10 15

Asn Ile Arg Gln Ala Gly Val Gln Tyr Ser Arg Ala Asp Glu Glu Gln
20 25 30

Gln Gln Ala Leu Ser Ser Gln Met Gly Phe
35 40

<210> 8

<211> 21

<212> PRT

<213> Mycobacterium tuberculosis

<400> 8

Gln Glu Ala Gly Asn Phe Glu Arg Ile Ser Gly Asp Leu Lys Tyr Thr
1 5 10 15

Gln Ile Asp Gln Val
20

<210> 9

<211> 16

<212> PRT

<213> Mycobacterium tuberculosis

<400> 9

Gly Asp Leu Lys Thr Gln Ile Asp Gln Val Glu Ser Thr Ala Gly Ser
 1 5 10 15

<210> 10

<211> 16

<212> PRT

<213> Mycobacterium tuberculosis

<400> 10

Gly Ser Leu Gln Gly Gln Trp Arg Gly Ala Ala Gly Thr Ala Ala Ala
 1 5 10 15

<210> 11

<211> 16

<212> PRT

<213> Mycobacterium tuberculosis

<400> 11

Gln Glu Ala Ala Asn Lys Gln Lys Gln Glu Leu Asp Glu Ile Ser Thr
 1 5 10 15

<210> 12

<211> 28

<212> PRT

<213> Mycobacterium tuberculosis

<400> 12

Ser Thr Asn Ile Arg Gln Ala Gly Val Gln Tyr Ser Arg Ala Asp Glu
 1 5 10 15

Glu Gln Gln Gln Ala Leu Ser Ser Gln Met Gly Phe

20

25

<210> 13

<211> 16

<212> PRT

<213> Mycobacterium tuberculosis

<400> 13

Arg Ala Asp Glu Glu Gln Gln Gln Ala Leu Ser Ser Gln Met Gly Phe
1 5 10 15

<210> 14

<211> 21

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 14

ctgcagcagg tgacgtcggt g

21

<210> 15

<211> 23

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 15
ccgggtggcc gggaagtctg tgt

23

<210> 16

<211> 23

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 16
actactttct ctttctacct tcc

23

<210> 17

<211> 39

<212> DNA

<213> Artificial/Unknown

Get
<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 17

gggggggatcc ggtaccaggt gacgtcgttg ttcagccag

39

<210> 18

<211> 39

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 18

gggggggtacc ggatcctcgt agtcggccgc catgacaac

39

<210> 19

<211> 31

<212> DNA

<213> Artificial/Unknown

Seq
<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 19

gggggggatcc caggtgacgt cgttgttcag c

31

<210> 20

<211> 31

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

15
06

<400> 20
gggggggtacc acggtgacgt cgttggtcag c

31

<210> 21

<211> 32

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 21
gggggggtacc aacggtgacg tcgttggtca gc

32

<210> 22

<211> 31

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

Handwritten signature or initials.

<400> 22
gggggggtacc gggtaggccgg gaagtctggt g

31

<210> 23

<211> 31

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 23
gggggggatcc ctgcagcagg tgacgtcggt g

31

<210> 24

<211> 30

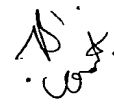
<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()


<223> Description of Artificial Sequence: synthetic DNA

<400> 24
ccctgcaacg aacctgccgt cgactccacc

30

<210> 25

<211> 39

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 25
gggggggatcc ggtaccaggt gacgtcgttg ttcagccag

39

<210> 26

<211> 51

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

13
6
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<223> Description of Artificial Sequence: synthetic DNA

<400> 26

gggggggatcc tcaatgggtga tggatgatggg ggaagcccat ttgcgaggac a

51

<210> 27

<211> 22

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 27

gcatcgaatg catgtctcgg gt

22

<210> 28

<211> 99

<212> PRT

<213> Mycobacterium leprae

<400> 28

11
Cont.

Met	Ala	Glu	Met	Ile	Thr	Glu	Ala	Ala	Ile	Leu	Thr	Gln	Gln	Ala	Ala
1				5					10					15	
Gln	Phe	Asp	Gln	Ile	Ala	Ser	Gly	Leu	Ser	Gln	Glu	Arg	Asn	Phe	Val
			20					25					30		
Asp	Ser	Ile	Gly	Gln	Ser	Phe	Gln	Asn	Thr	Trp	Glu	Gly	Gln	Ala	Ala
			35					40					45		
Ser	Ala	Ala	Leu	Gly	Ala	Leu	Gly	Arg	Phe	Asp	Glu	Ala	Met	Gln	Asp
	50					55					60				
Ile	Arg	Gln	Leu	Glu	Ser	Ile	Val	Asp	Lys	Leu	Asn	Arg	Ser	Gly	Gly
65					70					75				80	
Asn	Tyr	Thr	Lys	Thr	Asp	Asp	Glu	Ala	Asn	Gln	Leu	Leu	Ser	Ser	Lys
				85					90					95	
Met	Asn	Phe													

<210> 29

<211> 108

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

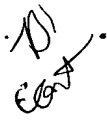
<222> ()..()

<223> Description of Artificial Sequence: Expression cassette

<400> 29

aggaacagat ctatgggatc cggtaccctg cagcatcacc atcaccatca ctagtgaaat 60

agcgaaacac gggatcgggc gagttcgacc ttccgctcggc ctcgccct 108


<400> 31
gaattcgagc tcggtacccg gggatcctct agagtcgacc tgcaggcatg caagctt

57

<210> 32

<211> 30

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

<400> 32
cccggatcct cagccaagct gaccgacctg

30

<210> 33

<211> 33

<212> DNA

<213> Artificial/Unknown

<220>

<221> misc_feature

<222> ()..()

<223> Description of Artificial Sequence: synthetic DNA

B. Wild

<400> 33
gccggtacca cgacggctca tcgccagttt gcc

33

<210> 34

<211> 15

<212> PRT

<213> Mycobacterium tuberculosis

<220>

<221> misc_feature

<222> ()..()

<223> Xaa is any amino acid

<400> 34

Ala	Glu	Met	Lys	Thr	Asp	Ala	Ala	Thr	Leu	Xaa	Gln	Glu	Ala	Gly
1				5					10					15
